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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,077	10/01/2003	Martin S. Scolaro	25493-459900	8342
27717 7590 07/11/2007 SEYFARTH SHAW LLP 131 S. DEARBORN ST., SUITE2400 CHICAGO, IL 60603-5803			EXAMINER TRAN, CHUC	
			ART UNIT 2821	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/677,077

Applicant(s)

SCOLARO ET AL.

Examiner

Chuc D. Tran

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 22-26 is/are allowed.
- 6) ☒ Claim(s) 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19,21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “control input terminal” in claims 1, 8, 18 and 26 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-12, and 18-26 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry (USP. 6,198,234) in view of Foerster (USP. 5,969,437).

Regarding claim 18, Henry disclose a drive circuit (800) in Fig. 4, comprising:

- an electronic switch means (804) connected to a lamp (5) for controlling current flow through the lamp from a DC source (16) (Col. 3, Line 19) (Abstract); and a control means (802) for pulse-width-modulation (PWM) of the switch means (804) for varying lamp brightness in proportion to PWM duty cycle (Col. 9, Line 38; and 55-58), wherein the control means (802) including temperature-responsive means (Vi) (Col. 8, Line 13-20) for reducing the PWM duty cycle when the lamp temperature exceeds a predetermined temperature (Col. 5, Line 50) (Abstract) (See Fig. 1 and 4). However, Henry does not go to details of a control input terminal (conventional ON/OFF manual switch). Foerster disclose a control input terminal (13) (ON/OFF manual switch) (Foerster Fig. 2). Thus, it would have been obvious to one having ordinary skill in the art to modify Henry's drive circuit by adding the control input terminal (conventional ON/OFF manual switch) into the drive power terminal as taught by Foerster in order to extend the lifetime of the battery energy when it is not used (See Foerster, Col. 1, Line 39).

Regarding claim 20, Henry disclose the control means includes selectively operable brightness selection means (Col. 8, Line 37) and (Col. 9, Line 23).

*Allowable Subject Matter*

5. Claims 1-12 and 22-26 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

Prior art Henry fails to disclose or suggest in combination with the remaining claimed limitation: the electronic switch connected in series with the lamp and the control circuit including a temperature-sensing circuit for reducing the PWM duty cycle when lamp temperature exceeds a predetermined temperature in claims 1, 8, 22 and 26, claims 2-7 and 9-12 are allowed since they are dependent on claims 1 and 8.

Prior art Henry fails to disclose or suggest in combination with the remaining claimed limitation: a method of reducing the duty cycle of pulse width modulation in response to a sensed temperature exceeding a predetermined temperature by altering a resistance in a timing circuit in claim 23, claim 24 is allowed since it is dependent on claim 23.

Prior art Henry fails to disclose or suggest in combination with the remaining claimed limitation: a method of automatically adjusting the duty cycle of pulse width modulation in response to a changes in the supply voltage in claim 25.

7. Claims 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC  
July 7, 2007

*Douglas W. Owens* 7/9/07

**DOUGLAS W. OWENS  
SUPERVISORY PATENT EXAMINER**